Drinking to good health: A tax on Thailand's alcohol

Man Isha Kaur, Keith Newman, Lee Fawcett, *Newcastle University*

Government taxes are applied to many things we buy. In some cases, these taxes are deliberately placed on unhealthy items from chocolate biscuits to cigarettes – not just to raise revenues for the government but also to discourage the public from their unhealthy habits. We analyse the Thai government's decision to put a tax on alcohol.

According to the UN's Food & Agriculture Organisation (FAO), Thailand ranks fifth worldwide in the consumption of alcohol, well above many European countries such as Ireland, Portugal and France. Well-known for making *Snake Whiskey* and other reptile-infused liquor, research conducted by the FAO indicates that Thai people generally prefer spirits to other types of alcohol and often consume large quantities of alcohol in a single sitting.

Figure 1: Snakes and other reptiles are often infused into liquor in Thailand.

In 2012, the *Thai Centre for Alcohol Studies* claimed that the average Thai citizen (aged 15 years or over) consumed 7.1 litres of pure alcohol[1] per year, bringing national annual consumption of pure alcohol to a staggering 378 million litres. The Thai government imposes a heavy duty on alcohol. Taxes for 2013 have increased the average price of pure alcohol by 60% to about 2,500 Baht per litre (the Baht is the Thai unit of currency). A decrease of 1.5% in the annual consumption of pure alcohol is forecast in Thailand for the year 2013, as a direct result of this price-hike.

Conventionally, the *demand curve* of a product represents how price varies with consumption. In accounting and finance, linear functions are often used for demand curves. If the gradient of the demand curve is less than -1, the product's demand is said to be *inelastic*. If a product has an inelastic demand, the quantity of that product sold does not decrease significantly as the price increases. This is often the case with popular products - products that people will continue to purchase even if they become more expensive. Alcohol is one such product; hence the Thai government can be assured of earning high tax revenue when imposing taxes on alcoholic beverages.

[1] In the UK, 1 unit of an alcoholic beverage consists of 10 grams of pure alcohol - which is around 12.7 ml.

Figure 2: Singha is a beer producer in Thailand. Their beer is sold worldwide, including in UK supermarkets.

Singha, a local Thai beer company, obviously have an interest in the demand curve for alcohol consumption in Thailand. Their own research has revealed that the price of pure alcohol decreases by 270 Baht for every one million litre increase in consumption; they also claim that, if annual consumption dropped to just 200 million litres of pure alcohol, the cost per litre would need to be as high as 46,300 Baht.

Campaigns such as Thai Health Promotion Foundation (THPF) support the new alcohol tax rates, believing that the increased price of alcoholic drinks will benefit the public by reducing the number of drinkers - especially amongst the youth. Overall, THPF recommend a reduction of at least 20% in annual national consumption for the year 2014. The subsequent health campaigns encourage the government to extend taxes to the large amount of home-made alcohol brewed and sold. However, tax laws on national produce do not get passed as easily as those on imported goods. Hence, in an effort to reduce the country's high consumption of the strong, home-made liquor, in 2014 the government plans to introduce a floor price of 7,000 Baht per litre - the minimum price pure alcohol could be sold for.

Things to think about

- Can you find the equation of a demand curve for alcohol consumption in Thailand?
- Can you visually represent this model to make it easier to understand?
- Think about the claim that the demand for alcohol is inelastic.
- What do you think is meant by a "ceiling price" for alcohol?
- Do you think your linear demand function is realistic? If not, why?
- Compare and contrast the demand curve you found earlier to that suggested by Singha's own research.
- Do you think the Thai government's plans for alcohol pricing in 2014 will help achieve the THPF's recommendations? Do you think similar plans should be considered for alcohol pricing in the U.K.?